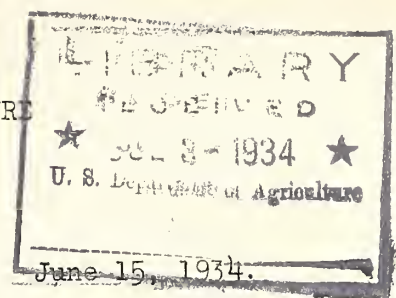


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UNITED STATES DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
Washington



Office of the Chief

CIRCULAR

INSTRUCTIONS FOR TRANSMITTING AIRPLANE WEATHER
OBSERVATIONS VIA TELETYPE AND RADIO.

(1) Beginning July 1, 1934, the following numerical system of coding will be used for transmitting airplane weather observations via teletype and radio. When these reports are sent by commercial wire they will be sent in code in accordance with Circular dated December 1, 1933, "Instructions For Coding Airplane Observations and Transmitting Same to District Forecast Centers."

(2) Metric units will be used.

(3) The data will be transmitted in accordance with Circular referred to above, except that the reports will begin with the station designation (teletype call letters); elevations to the nearest 10 meters with the unit's place cipher omitted; pressures will be sent to the nearest whole millibar; temperatures to the nearest whole degree °C.; and relative humidities to the nearest whole percent. Clouds will be indicated in accordance with Paragraphs 15(a), (b), (c), (d), (e), (f), (i) and 16, of Section II, Circular dated July 1, 1933, "Instructions for Preparing Pilot Balloon Reports For Transmission in English Units on Radio and Teletype Circuits."

(4) Following is a sample message:

<u>Transmitted</u>	<u>Deciphered</u>
CX	Cheyenne, Wyo.
5	Five a. m., E. S. T.
1006	1006 mb., surface pressure at time of take-off.
3 83	3°C., 83%, surface temperature and relative humidity at time of take-off.
47	470 meters, elevation of first level above sea level.
964	964 mb., pressure at first level.
6 78	6°C., 78%, temperature and relative humidity at first level.
112	1120 meters, elevation of second level above sea level.
893	893 mb., pressure at second level.

<u>Transmitted</u>	<u>Deciphered</u>
-5 87	-5°C., 87%, temperature and relative humidity at second level.
152	1520 meters, elevation of third level above sea level.
852	852 mb., pressure at third level.
-9 43	-9°C., 43%, temperature and relative humidity at third level.
213	2130 meters, elevation of fourth level above sea level.
789	789 mb., pressure at fourth level.
-6 35	-6°C., 35%, temperature and relative humidity at fourth level.
252	2520 meters, elevation of fifth level above sea level.
755	755 mb., pressure at fifth level.
-5 37	-5°C., 37%, temperature and relative humidity at fifth level.
384	3840 meters, elevation of sixth level above sea level.
639	639 mb., pressure at sixth level.
-12 95	-12°C., 95%, temperature and relative humidity at sixth level.
509	5090 meters, elevation of seventh level above sea level.
543	543 mb., pressure at seventh level.
-19 63	-19°C., 63%, temperature and relative humidity at seventh level.
5CISTV	5/10 Ci. St. from the northwest.
8ASTV	8/10 A. St. from the west.
384	Base of A. St. 3840 meters above sea level.

Transmitted

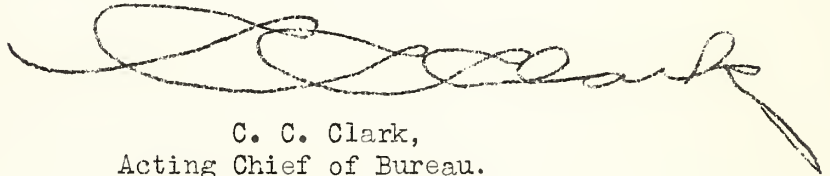
Deciphered

426	Top of A. St. 4260 meters above sea level.
SNOW 223 426	Snow encountered between 2230 and 4260 meters above sea level.

The above would be written as follows:

CX5/1006 3 83/47 964 6 78/112 893 -5 87/152 852 -9 43/213 789 -6 35/252 755
-5 37/384 639 -12 95/509 543 -19 63/5CISTW/8AST-384 426/SNOW 223 426.

Oblique lines will be used to separate the data for the respective levels and spaces used to separate the individual elements for each level as indicated above.



C. C. Clark,
Acting Chief of Bureau.

